

03-31-00



UTILITY PATENT APPLICATION TRANSMITTAL

22193

PATENT TRADEMARK OFFICE



Address to:

Box PATENT APPLICATION
Assistant Commissioner for Patents
Washington, DC 20231

Attorney Docket No.

1697 (USW 0562 P&G)

Inventor(s) or Application Identifier:
Yvonne Ng

03/30/00
JG678 U.S.
JG679/538767
03/30/00

1. This application entitled SYSTEM AND METHOD FOR MANAGING A PLURALITY OF LOCAL LISTS OF A SINGLE USER is:

- a. A new application under 37 C.F.R. §1.53(b).
- b. A continuation divisional or continuation-in-part application under 37 C.F.R. § 1.53(b) of prior application Serial No. / filed on , entitled .

Application elements and other attached papers:

- 2. Specification (incl. Claims and Abstract) [Total Pages 13]
- 3. Drawings (informal formal) [Total Sheets 2]
- 4. Oath or Declaration
 - a. Newly-executed
 - b. Copy from a prior application (37 C.F.R. § 1.63(d))
- 5. Incorporation By Reference: The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Item 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
- 6. This application is filed by fewer than all the inventors named in the prior application, 37 C.F.R. § 1.53(d)(4).
 - a. **DELETE** the following inventor(s) named in the prior nonprovisional application:

 - b. The inventor(s) to be deleted are set forth on a separate sheet attached hereto.

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this UTILITY PATENT APPLICATION TRANSMITTAL and the documents referred to as attached therein are being deposited on the below date with the United States Postal Service in an envelope as "Express Mail Post Office to Addressee" addressed to: Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

Express
Mail Label No. EL503257137US

Julie A. Barber
(Type or print name of person mailing paper)

Date of Deposit: March 30, 2000

Julie A. Barber
(Signature of person mailing paper)

7. Preliminary Amendment:

- a. A Preliminary Amendment is attached.
- b. Cancel in this application original claims _____ of the prior application before calculating the filing fee.
- c. Please amend the specification by inserting before the first line the sentence:

"This is a
 continuation
 divisional
of copending application(s)
 Serial number ____ / _____ filed on _____."

- d. A Petition to Suspend Prosecution For The Time Necessary to File An Amendment (New Application Filed Concurrently) is attached.

8. Small entity status:

- a. A small entity statement is attached.
- b. A small entity statement was filed in the prior nonprovisional application and such status is still proper and desired.
- c. Is no longer desired.

9. Fee Calculation:

FOR	NUMBER FILED	NUMBER EXTRA	RATE	CALCULATIONS
TOTAL CLAIMS (37 C F R § 1 16(c))	24 -20 =	4	X 18.00	72.00
INDEPENDENT CLAIMS (37 C F R § 1 16(b))	3 -3 =	0	X 78.00	0.00
MULTIPLE DEPENDENT CLAIMS (if applicable) (37 C.F.R. §1.16(d))			260.00	
			BASIC FEE (37 C.F.R. § 1 16(a))	690.00
		Total of above Calculations =		762.00
Reduction by 50% for filing by small entity (Note 37 C.F.R. §§ 1.9, 1.27, 1.28)				
	Assignment Recordal Fee		40.00	40.00
			TOTAL =	802.00

10. A check in the amount of \$_____ is enclosed.

11. The Commissioner is hereby authorized to credit overpayments or charge the following fees (or any deficiency therein) to U S WEST, Inc. Deposit Account No. 21-0456:

- a. Fees required under 37 C.F.R. § 1.16.
- b. Fees required under 37 C.F.R. § 1.17.

12. Maintenance of Copendency of Prior Application

A request for extension of time and the appropriate fee have been filed in the pending **prior** application (or are being filed in the prior application concurrently herewith) to extend the period for response until _____.

13. An Information Disclosure Statement (IDS) is attached, along with the following indicated attachments thereto:

- a. Form PTO/SB/08B (one sheet(s))
- b. Copies of references cited

14. Certified copy of priority document(s)

15. Return Receipt Postcard

16. Other: _____

17. An Assignment of the invention to U S WEST, Inc.

- a. is attached.
- b. was recorded on _____ at Reel _____, Frame _____.

18. The power of attorney in the prior application is to:

Name of Attorney of Record

Reg. No.

- The power appears in the original papers in the prior application.
- The power does not appear in the original papers, but was filed on _____.
- A new power has been executed and is attached.

19. Correspondence Address: Please address all future communications to:

Mark A. Thomas,



22193

PATENT TRADEMARK OFFICE

Telephone: 877-879-4747 or 303-672-2700; Fax: 303-308-9456

Respectfully submitted,

Date March 30, 2000

Jeremy J. Curcuri
Name: Jeremy J. Curcuri
Registration No.: 42,454

Attorney or agent of record
 Filed under Rule 34(a)

SYSTEM AND METHOD FOR MANAGING A PLURALITY OF LOCAL LISTS OF A SINGLE USER

TECHNICAL FIELD

The present invention relates to a system and method for managing a
5 plurality of local lists of a single user located at a plurality of remote appliances.

BACKGROUND ART

The use of information management products has become widespread.
For example, numerous products, both hardware and software based, contain address
books or other similar lists that allow the user to keep names, telephone numbers,
10 e-mail addresses, bookmarks, and other personal contact information. However,
these products do not all currently exist on the same network, nor are they all web-
enabled. Therefore, a problem arises when a user that uses some, or all, of those
products for various purposes, has no easy way of synchronizing and accessing the
lists.

15 Unfortunately, although each product, alone, may be quite useful, it
becomes difficult and cumbersome for the user to manage multiple lists of
information on different products. For example, a user may have a computer
software program at work that contains an address and phone number list. That same
user may also have address and phone number software on a different computer, such
20 as a home computer. If it is not possible to network these two computers together,
a user is faced with the cumbersome and difficult task of managing both lists
separately. Although some attempts have been made to provide portable devices that
can store information for a user, such as a personal digital assistant, the management
of the personal digital assistant and the various other devices that a user may own
25 still, at times, becomes difficult.

For the foregoing reasons, there is a need for a system and method for managing a plurality of local lists that overcomes the problems and limitations of the prior art.

DISCLOSURE OF INVENTION

5 It is, therefore, an object of the present invention to provide a system and method for managing a plurality of local lists of a single user utilizing a compact user-carried smart card including a microprocessor and a memory storing a master list configured for synchronizing with each local list.

In carrying out the above object, a system for managing a plurality of local lists of a single user is provided. The plurality of local lists is located on a plurality of remote appliances. Each appliance holds a corresponding local list and includes a card reader. The system comprises a compact user-carried smart card. The smart card includes a microprocessor and a memory. The memory stores a master list. The master list is configured for synchronizing with each local list. The 10 microprocessor is programmed to synchronize the master list with a local list on a remote appliance when the smart card is engaged with the remote appliance card reader to allow the user to carry the smart card with the master list stored in the smart card memory. A user may carry the smart card to various remote appliances and synchronize the master list with the various local lists of the appliances.

20 Advantageously, the user may carry a single compact smart card that holds a master list. The smart card acts as a token, and synchronizes any local list with the master list. Further, the smart card, on some appliances, where there is no local list, may allow the user to access the master list.

In a preferred implementation, an access type of remote appliance is 25 configured to display a list and includes a card reader. The microprocessor is further programmed to send the master list to the access type remote appliance for display thereon when the smart card is engaged with the remote appliance card reader of the access type remote appliance.

It is to be appreciated that the list may include a plurality of entries of various types. For example, entries may include addresses such as residential or work addresses. Further, entries may include names, telephone numbers (pager numbers, other numbers such as a fax machine, etc.), e-mail addresses, electronic bookmarks, and even browser or desktop preferences for a computer or web access device. Even further, the memory may store an electronic wallet. In a preferred embodiment, the memory stores an encrypted smart card password to control access to the master list. Further, all the data on the smart card may be encrypted for privacy. As such, a lost smart card does not result in all of a user's personal information falling into the hands of another.

Further, in carrying out the present invention, a system for managing a plurality of local lists of a single user is provided. The system comprises a plurality of remote appliances for use on different networks wherein each appliance holds a corresponding local list of the plurality of local lists. Each appliance includes a card reader. The system further comprises a compact-user carried smart card including a microprocessor and a memory. The memory stores the master list. The master list is configured for synchronizing with each local list. The microprocessor is programmed to synchronize the master list with a local list on a remote appliance when the smart card is engaged with the remote appliance card reader to allow the user to carry the smart card with the master list stored in the smart card memory. A smart card may be carried by the user to various remote appliances allowing the user to synchronize the master list with the various local lists of the appliances.

In some applications, the plurality of remote appliances includes at least one access type of remote appliance configured to display a list and including a card reader. The microprocessor is further programmed to send the master list to the access type remote appliance for display thereon when the smart card is engaged with the remote appliance card reader of the at least one access type remote appliance. In some applications, the plurality of remote appliances includes web enabled appliances and non-web-enabled appliances.

It is appreciated that the memory may store a plurality of different types of information including addresses, names, telephone numbers, e-mail addresses, electronic bookmarks, electronic wallet information, passwords, etc.

Still further, in carrying out the present invention, a method for
5 managing a plurality of local lists of a single user is provided. The method comprises storing a plurality of local lists on a plurality of corresponding remote appliances. Each appliance includes a card reader. The method further comprises storing a master list on a compact user-carried smart card including a microprocessor and a memory. The memory stores the master list. The master list is configured for
10 synchronizing with each local list. The microprocessor is programmed to synchronize the master list with a local list on a remote appliance when the smart card is engaged with the remote appliance card reader.

In a preferred embodiment, the method further comprises
15 synchronizing the master list with at least one of the local lists. Even further, in a preferred embodiment, the plurality of remote appliances includes an access type of remote appliance configured to display a list and including a smart card reader. The method further comprises sending the master list to the access type remote appliance for display thereon when the smart card is engaged with the remote appliance card reader of the access type remote appliance.

20 The above object and other objects, features, and advantages of the present invention are readily apparent from the following detailed description of the best mode for carrying out the invention when taken in connection with the accompanying drawings.

BRIEF DESCRIPTION OF DRAWINGS

25 FIGURE 1 is a block diagram illustrating a compact user-carried smart card of the present invention, illustrating the ability of a smart card to synchronize the master list with various local lists on various remote appliances;

FIGURE 2 is a block diagram illustrating a method of the present invention; and

FIGURE 3 illustrates the interaction of a compact user-carried smart card of the present invention with various remote appliances.

5

BEST MODE FOR CARRYING OUT THE INVENTION

With reference to Figure 1, a system of the present invention is generally indicated at 10. In methods and systems of the present invention, a compact user-carried smart card is utilized to access and manage a master list with multiple appliances. The smart card is used to store, access, synchronize, and manage information among various information appliances and applications. As shown, smart card 12 includes a microprocessor 14 and memory 16. As shown, smart card 12 includes a power supply 18. Further, smart card 12 includes output logic 20. It is appreciated that the output portion 20 of smart card 12 may take many forms. For example, output logic 20 may communicate with the various remote appliances through a contact or contactless connection, as appreciated by those skilled in the art.

Further, it is appreciated that embodiments of the present invention are not limited to any particular types of remote appliances. The illustrated examples include a web device 22, a computer 24, a personal digital assistant 26, a cellular phone 28, a home or office phone 30, and a pay phone (such as a public telephone). Smart card 12 is preferably approximately credit card size, for easy carrying by the user. In accordance with the present invention, the smart card, being compact and user-carried and having processing power and memory, is a token for holding the master list or most current data for the user's various information lists. Smart card 12 is used to synchronize with the individual lists of different applications and appliances that utilize different hardware on separated networks.

With reference to Figure 2, a method of the present invention is generally indicated at 40. At block 42, local lists are stored on remote appliances.

At block 44, the master list is stored on a compact user-carried smart card. At block 46, the master list is synchronized with the local list. That is, the user carries the smart card on his or her person, allowing the user to go to various remote appliances and applications and synchronize the master list with the various local lists of the appliances and applications. At block 48, the master list is displayed on an access-only type of remote appliance. For example, a public phone may be configured to read the smart card and display the information stored therein, but not allow the user to modify that information at the public phone.

Advantageously, smart card acts as a token for holding the master list for various local lists kept on various devices. As best shown in Figure 3, smart card 62 makes information managing less difficult and cumbersome for user 64. As illustrated, the master list on smart card 62 may synchronize with a local list on a computer 66. Computer 66 is shown connected to a network 68. Further, the master list on smart card 62 may synchronize with a local list of information stored in a set top box 70 connected to a television 72. Set top box 70 is connected to a network 74. Set top box 70 may be configured for web access, with smart card 62 storing bookmarks or browsing preferences.

Further, smart card 62 may synchronize with a local list on a telephone 80, connected to a telephone network 82. For example, the smart card 62 may store speed dial numbers, or even messages provided that the smart card has sufficient memory.

Even further, in the examples of Figure 3, smart card 62 may synchronize with a laptop computer 84, a personal digital assistant 86, or even a cellular telephone 88. Advantageously, the compact user-carried smart card may interoperate with hardware appliances and software applications that include a personal address book of some form, or any other information that is normally managed by any of these appliances or applications for a user. The hardware or software allows the user to keep, access, and manage a list of, for example, speed dial numbers, e-mail addresses, bookmarks, or other personal contact information, in addition to any other types of information. When users use more than one

hardware/software device, the user ends up with various local lists at the different devices. Advantageously, in accordance with the present invention, the smart card holds a master list for synchronizing with the various different lists of the different appliances and applications.

5 For example, at the end of the work day, a user may synchronize his or her smart card with an address book or other personal information kept on a computer at work, and then carry the smart card with him or her. On the road, the person may need to call someone from a mobile phone or a pay phone, and accesses the smart card speed dial list by putting the smart card in the card reader on the pay
10 phone (or mobile phone). Further, the user may read the smart card with the card reader at home, such as at his or her home telephone, set top box, or home computer. The smart card synchronizes the master list with various local lists on various devices. Advantageously, the user is able to access the most updated version of personal contact information with all the appliances and applications he or she
15 uses.

20 In some applications, the smart card could also hold an electronic purse or electronic wallet that contains some virtual cash and credit card information. The smart card could be used to make purchases and payments on line. In addition, included on the smart card could be a loyalty program that rewarded the user for using his or her smart card.

25 In accordance with the present invention, the smart card acts primarily as a data storage device. The rendition of the data into a form that is friendly to the user is performed by each individual appliance or application, and would vary according to the capabilities of each appliance or application. For example, while on a personal computer, full information display and maximum functionality is provided. A public phone may be limited to a four line screen and four soft-keys, and the user at a public phone may only be able to access his or her lists with minimal visual enhancement and not be able to do any form of synchronization. That is, the degree of interaction between the smart card and the appliance or application
30 varies from device to device or application to application. Even further, in a

preferred embodiment, the processing power of the smart card that is used for security purposes by storing an encrypted password or some other information that controls access to the information on the card in the memory. In yet another application, the smart card could be very useful for using, for example, a public 5 telephone, a public Internet station, or a public e-mail device, at, for example, the public library or other place.

While embodiments of the invention have been illustrated and described, it is not intended that these embodiments illustrate and describe all possible forms of the invention. Rather, the words used in the specification are 10 words of description rather than limitation, and it is understood that various changes may be made without departing from the spirit and scope of the invention.

WHAT IS CLAIMED IS:

1 1. A system for managing a plurality of local lists of a single user,
2 the plurality of local lists being located at a plurality of remote appliances wherein
3 each appliance holds a corresponding local list and includes a card reader, the system
4 comprising:

5 a compact user-carried smart card including a microprocessor and a
6 memory storing a master list, the master list being configured for synchronizing with
7 each local list, the microprocessor being programmed to synchronize the master list
8 with a local list on a remote appliance when the smart card is engaged with the remote
9 appliance card reader to allow the user to carry the smart card with the master list
10 stored in the smart card memory to various remote appliances and synchronize the
11 master list with the various local lists of the appliances.

1 2. The system of claim 1 wherein an access type of remote
2 appliance is configured to display a list and includes a card reader, and wherein the
3 microprocessor is further programmed to send the master list to the access type remote
4 appliance for display thereon when the smart card is engaged with the remote appliance
5 card reader of the access type remote appliance.

1 3. The system of claim 1 wherein the list includes a plurality of
2 entries and at least one of the entries is an address.

1 4. The system of claim 1 wherein the list includes a plurality of
2 entries and at least one of the entries is a name.

1 5. The system of claim 1 wherein the list includes a plurality of
2 entries and at least one of the entries is a telephone number.

1 6. The system of claim 1 wherein the list includes a plurality of
2 entries and at least one of the entries is an email address.

1 7. The system of claim 1 wherein the list includes a plurality of
2 entries and at least one of the entries is an electronic bookmark.

1 8. The system of claim 1 wherein the memory also stores an
2 electronic wallet.

1 9. The system of claim 1 wherein the list includes a plurality of
2 entries and at least one of the entries is a password.

1 10. The system of claim 1 wherein the memory stores an encrypted
2 smart card password to control access to the master list.

1 11. A system for managing a plurality of local lists of a single user,
2 the system comprising:

3 a plurality of remote appliances for use on different networks wherein
4 each appliance holds a corresponding local list of the plurality of local lists, and each
5 appliance includes a card reader; and

6 a compact user-carried smart card including a microprocessor and a
7 memory storing a master list, the master list being configured for synchronizing with
8 each local list, the microprocessor being programmed to synchronize the master list
9 with a local list on a remote appliance when the smart card is engaged with the remote
10 appliance card reader to allow the user to carry the smart card with the master list
11 stored in the smart card memory to various remote appliances and synchronize the
12 master list with the various local lists of the appliances.

1 12. The system of claim 11 wherein the plurality of remote
2 appliances includes at least one access type of remote appliance configured to display
3 a list and including a card reader, and wherein the microprocessor is further
4 programmed to send the master list to the access type remote appliance for display
5 thereon when the smart card is engaged with the remote appliance card reader of the
6 at least one access type remote appliance.

1 13. The system of claim 11 wherein the plurality of remote
2 appliances includes web-enabled appliances and non-web-enabled appliances.

1 14. The system of claim 11 wherein the list includes a plurality of
2 entries and at least one of the entries is an address.

1 15. The system of claim 11 wherein the list includes a plurality of
2 entries and at least one of the entries is a name.

1 16. The system of claim 11 wherein the list includes a plurality of
2 entries and at least one of the entries is a telephone number.

1 17. The system of claim 11 wherein the list includes a plurality of
2 entries and at least one of the entries is an email address.

1 18. The system of claim 11 wherein the list includes a plurality of
2 entries and at least one of the entries is an electronic bookmark.

1 19. The system of claim 11 wherein the memory also stores an
2 electronic wallet.

1 20. The system of claim 11 wherein the list includes a plurality of
2 entries and at least one of the entries is a password.

1 21. The system of claim 11 wherein the memory stores an encrypted
2 smart card password to control access to the master list.

1 22. A method for managing a plurality of local lists of a single user,
2 the method comprising:

3 storing a plurality of local lists on a plurality of corresponding remote
4 appliances, each appliance including a card reader; and

5 storing a master list on a compact user-carried smart card including a
6 microprocessor and a memory for storing the master list, the master list being

7 configured for synchronizing with each local list, the microprocessor being
8 programmed to synchronize the master list with a local list on a remote appliance when
9 the smart card is engaged with the remote appliance card reader.

4 sending the master list to the access type remote appliance for display
5 thereon when the smart card is engaged with the remote appliance card reader of the
6 access type remote appliance.

ABSTRACT OF THE DISCLOSURE

A system for managing a plurality of local lists of a single user includes a compact user-carried smart card including a microprocessor and a memory storing a master list. The plurality of local lists is located at a plurality of remote appliances. Each appliance holds a corresponding local list and includes a card reader. The master list is configured for synchronizing with each local list. The microprocessor is programmed to synchronize the master list with the local list on a remote appliance when the smart card is engaged with the remote appliance card reader. Synchronization allows the user to carry the smart card with the master list stored in the smart card memory to various remote appliances and synchronize the master list with the various local lists of the appliances.

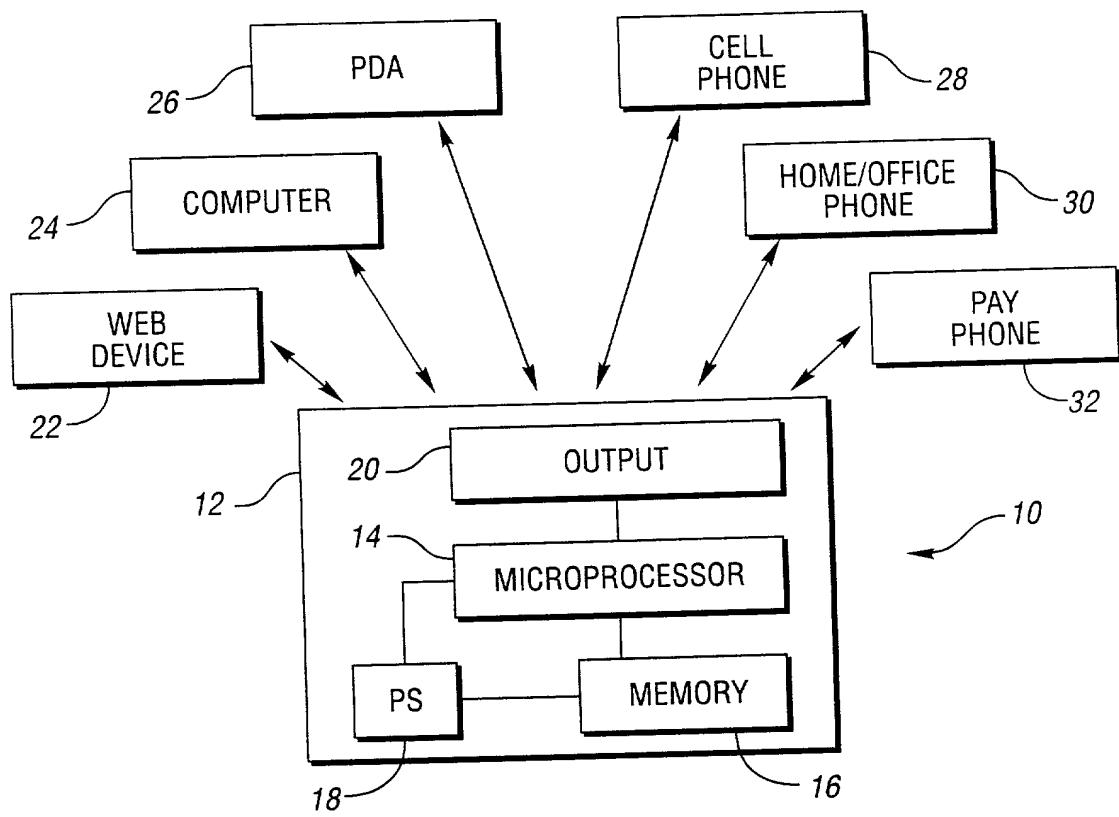


Fig. 1

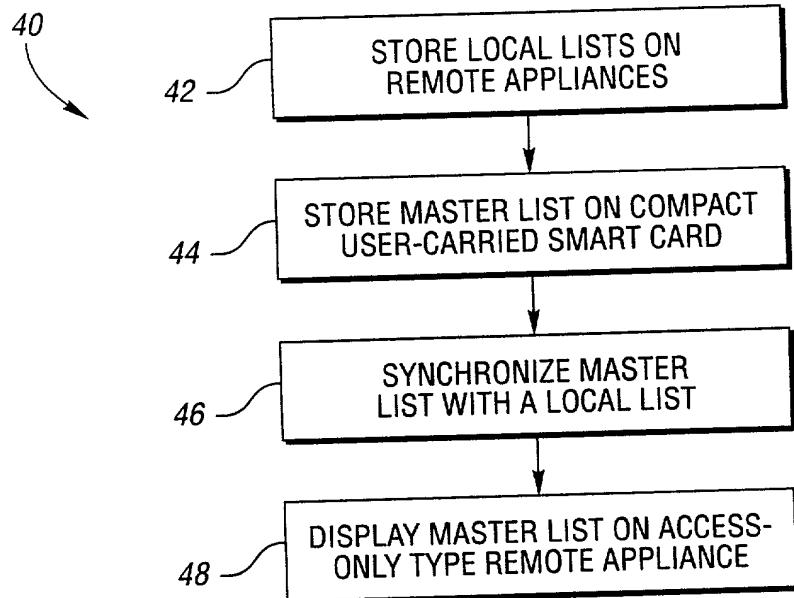
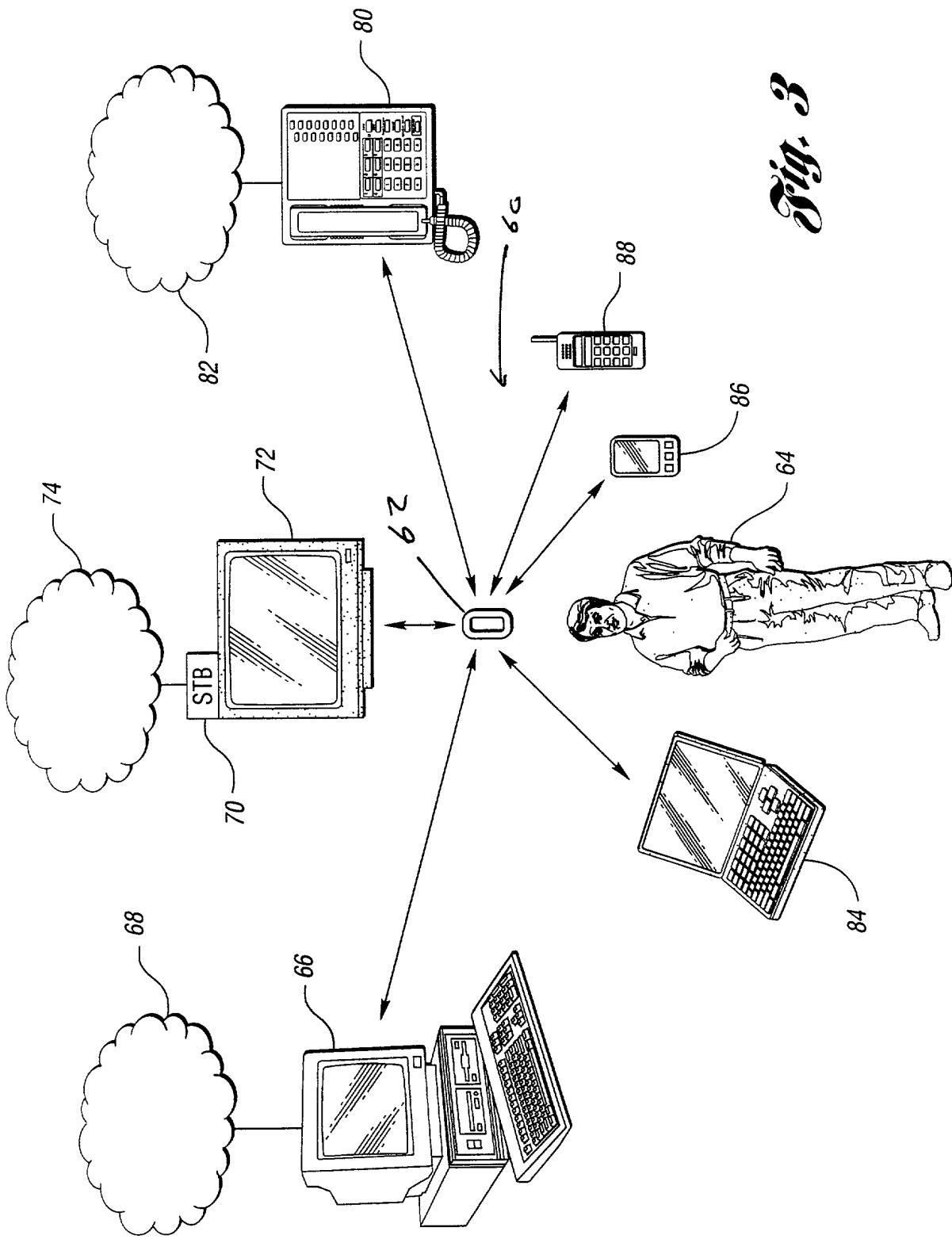


Fig. 2

Fig. 3

6000 6001 6002 6003 6004 6005 6006 6007 6008 6009 600A 600B 600C 600D 600E 600F 600G 600H 600I 600J 600K 600L 600M 600N 600O 600P 600Q 600R 600S 600T 600U 600V 600W 600X 600Y 600Z



DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

Atty. Docket No. 1697 (USW 0562 PUS)
 First Named Inventor Yvonne Ng

A named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**SYSTEM AND METHOD FOR MANAGING A
PLURALITY OF LOCAL LISTS OF A SINGLE USER**

the specification of which:

is attached hereto; or
 was filed on (MM/DD/YYYY) _____ as U.S. Application Number or PCT International Application Number _____, and was amended on (MM/DD/YYYY) _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below, and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Priority Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? (Yes/No)
.....
.....

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)
.....
.....

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

Application Number(s)	Filing Date (MM/DD/YYYY)	Status: Patented, Pending, Abandoned
.....
.....

Declaration for Patent Application (cont'd.)

Atty. Docket No. 1697 (USW 0562 PUS)

I hereby appoint the practitioners associated with Customer Number 22193 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to that Customer Number. Telephone calls should be directed to U S WEST, Inc., Law Department-Intellectual Property Group, at (877) 879-4747 or (303) 672-2700.

**22193**

PATENT TRADEMARK OFFICE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole or First Inventor Yvonne Ng

Inventor's signature Yvonne Ng Date 3/22/00

Post Office Address 3206 Goldeneye Place, Superior, CO 80027

Residence (same as above) Citizenship Singapore

Full Name of Second Joint Inventor _____

Inventor's signature _____ Date _____

Post Office Address _____

Residence (same as above) Citizenship _____

Full Name of Third Joint Inventor _____

Inventor's signature _____ Date _____

Post Office Address _____

Residence (same as above) Citizenship _____

Full Name of Fourth Joint Inventor _____

Inventor's signature _____ Date _____

Post Office Address _____

Residence (same as above) Citizenship _____